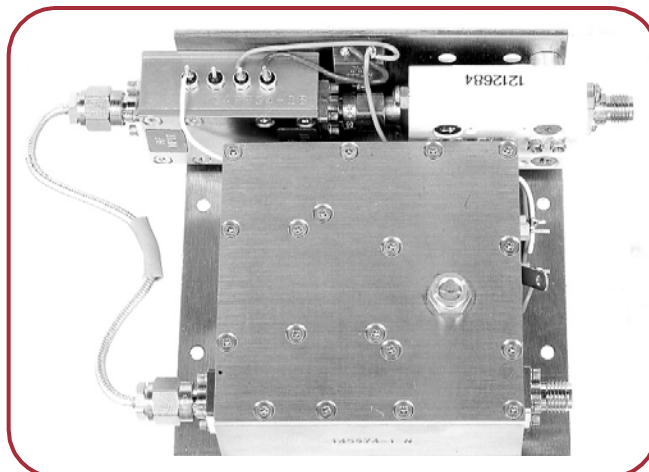


ULTRA-LOW PHASE-LOCKED DIELECTRIC RESONATOR OSCILLATORS

PLDRO SERIES 1.75 – 6.7 GHz

FEATURES

- Lowest phase noise
- Very fine frequency resolution
- Reference from 5 to 100 MHz
- Internal reference available
- Small package
- Low power consumption
- 100% Burn-in & Environmentally tested
- Three Year Warranty



PLDRO SERIES		
PARAMETERS	UNITS	SUBHARMONIC
Output Frequency range	GHz	1.75 to 6.7
Output power (minimum)	dBm	+13
Harmonics (maximum)*	dBc	-20
Fundamentals (maximum)	dBc	N/A
Spurious (maximum)	dBc	-85
Phase noise	dBc/Hz	See next page
Reference frequency**	MHz	5 to 100
Reference input power	dBm	0± 3
Voltage	VDC	+5.6 or +8
Voltage tolerance (maximum)	VDC	+/- 0.2
Current (maximum)	mA	550
Load VSWR (maximum)		2:1
Alarm***		TTL "high" in-lock
Connectors		
RF in/out		SMA/SMA
Voltage/Alarm/Phase voltage		Solder pin feedthru

* For better harmonics consult factory.

** Reference frequency above 100 MHz is available, consult factory

*** Reverse logic available

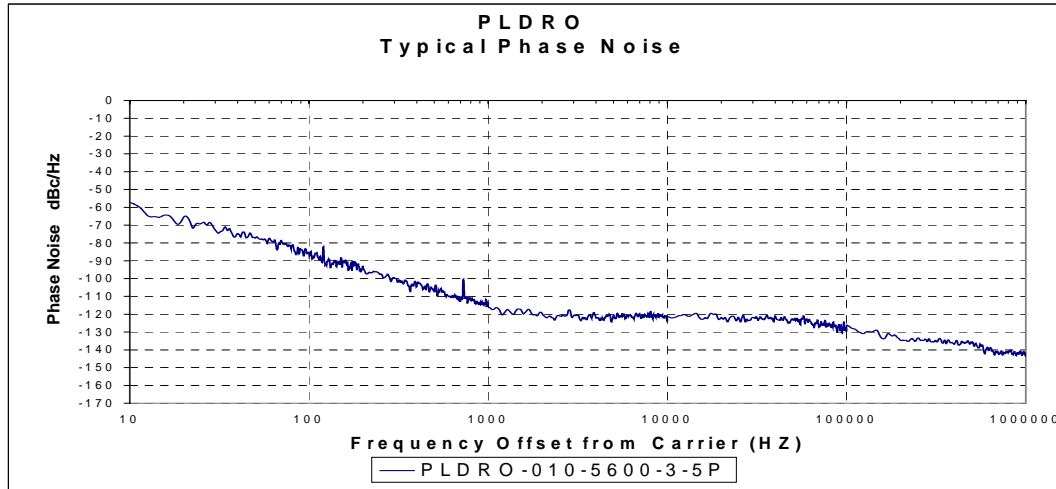
ENVIRONMENTAL CONDITIONS

Operating temperature****	-20 to +70°C
Storage temperature	-50 to +100°C
Humidity	95% at 40°C, noncondensing
Shock (survival)	30 g's, 10 ms pulse
Vibration (survival)	20 to 2000 Hz random to 4 g's rms
Weight	125 grams (typical)

**** Extended temperature ranges available, consult factory.



ULTRA-LOW PHASE-LOCKED DIELECTRIC RESONATOR OSCILLATORS



Phase Noise @	PLDRO SUBHARMONIC	
	1.75GHz – 3.35GHz	3.35GHz – 6.7GHz
10Hz	-53dBc/Hz	-48dBc/Hz
100Hz	-76dBc/Hz	-73dBc/Hz
1KHz	-110dBc/Hz	-108dBc/Hz
10KHz	-117dBc/Hz	-115dBc/Hz
100KHz	-120dBc/Hz	-118dBc/Hz
1MHz	-143dBc/Hz	-141dBc/Hz

ORDERING INFORMATION

External Reference Option:

PLDRO - - - - **P**

External Reference Frequency (MHz) Output Frequency (MHz) ALARM D.C. Supply (+volts)

Internal Reference Option:

PLDRO-I - - - **P**

Output Frequency (MHz) ALARM D.C. Supply (+volts)

Alarm:

3. TTL; Low in Lock, High out of Lock
4. TTL; High in Lock, Low out of Lock



OUTLINE DRAWING

156650 PLDRO SERIES (SUBHARMONIC)

